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REFLECTIONS ON THE PLAGUE YEARS
By Michael Urban, Ph.D.

AIDS. The most electrifying, terrifying, exaggerated, hyped, misunderstood and misrepresented disease of modern time. By this late date I would assume that almost everyone is familiar with the wide range of personal and political responses that have been offered for public consumption on "the problem of AIDS". Since this article is not written for the purpose of selling a magazine, or adding to an already overblown campaign of national hysteria, I will happily dispense with the usual grim warnings about casual couplings with partners that may be the death of you. I will leave that to the esteemed Dr. Everett Koop, our surgeon general.

Instead, I would like to review briefly the current status of both conventional and unconventional beliefs about, and treatments of, this most puzzling of afflictions.

ORIGINS OF AIDS

Theories regarding the origins of AIDS, a retrovirus, are abundant, ranging from the nefarious CIA/WHO/NCI conspiracy theories, to Green Monkeys, to God's Wrath against homosexuals, to laboratory accidents, contaminated smallpox and/or Hepatitis B vaccines and of course, natural evolution. Some of these are more compelling than others, while a few require a rather remarkable ability to weave together circumstantial information into a hair-raising scenario of communist world domination through the agencies of WHO (the World Health Organization) and the NCI (National Cancer Institute).

The latter makes for interesting fireside chats, and seems to sit well with the followers of Lyndon La Rouché and those of similar persuasion, but is seriously lacking in real evidence. What little support can be marshalled for conspiracy theorists is largely a consequence of our Government's abysmal history of using the American public as unwitting participants in "experiments" of dubious scientific merit. A small sampling includes the various "mind control" drug programs uncovered by the Church Committee hearings of 1975 and 1976 such as BLUEBIRD, ARTICHOKE, CHATTER, MK-ULTRA AND MK-NAOMI.

The violations of human and civil rights revealed through these hearings were almost beyond belief and helped to expose additional abuses such as the 1950 Army program in which turkey feathers infected with cereal rust spores were released over a crop of oats to determine the feasibility of using this method to initiate a cereal rust epidemic. Also in 1950, the Navy sprayed a cloud of bacteria in San Francisco to determine air-borne dispersion patterns in biological warfare applications of this type. While the Navy claimed that the bacillus used was harmless, there was one death attributed to the exercise, and thousands of residents came down with flu-like symptoms.

The list of "civilian" medical experiments is quite long, and includes the exposure of unknowing victims to, among other things, Yellow fever, Whooping cough, countless drugs and toxins, Plague, induction of Beri-Beri and Pellagra, and exposure to dioxin, better known as Agent Orange. There is a notable lack of informed consent by the subjects of these experiments.

However, for the purposes of this discussion, perhaps the most notorious piece of dubious "science" was the Tuskegee Syphilis Study. This study was undertaken by the U.S. Public Health Service, the predecessor of today's Centers for Disease Control (CDC), in 1932. The study monitored the progress of untreated syphilis in 400 poor, uneducated Black men in Tuskegee, Alabama. They were never told that they had the disease, and were denied treatment until 1972, when an outraged worker

stumbled onto the still-ongoing study and finally blew the whistle. In the face of nationwide condemnation of the project the CDC condoned the study for being "appropriate for its time".

It is worth pointing out that the CDC director who approved continued funding for this project in 1969, Dr. David Spencer, became the New York City Health Commissioner, and a key player in AIDS policy in the early 1980's. In light of these previous excesses, one cannot lightly dismiss the speculations of experimentation and cover-up as the mere ravings of a lunatic fringe. The probability is quite high that the AIDS virus is a mutant that was adapted for growth in human cell lines in virology labs. Numerous articles in the medical literature have commented on the genetic homology of the AIDS virus with the bovine leukemia virus, bovine syncytial virus, and "maedi visna", a retrovirus that is endemic to sheep. In virology circles this sort of genetic similarity is rarely considered a coincidence, and in fact several very prestigious and respected virologists have publicly stated that it is unlikely that the AIDS virus could have arisen "de novo", or naturally.

Further compounding the possibility that this virus might be a laboratory accident is the National Cancer Institute's (NCI) thirty year history of uncontrollable cell-line contamination. The notorious HeLa cell, a particularly virulent cancer first isolated from a cervical tumor, has contaminated virtually every experimental cancer cell culture since the early 1950's. This, in face of the most stringent attempts at isolation and sterilization known to man. I mention this only to illustrate the possibility that the AIDS virus may be another famous escapee from the test tubes of NCI. We really have no way of knowing, and I doubt that the principles involved would volunteer information of this nature if in fact it were true. Thus we are left with a nagging question mark with respect to this particular issue.

So much for controversies regarding the origin of the virus. We know the monkey isn't the culprit, we know it looks similar to some viruses that people have been fooling around with in the lab, but other than that there doesn't appear to be anything more useful to be gained by inquiries in this vein. The fact is the virus is here, and regardless of where it came from we have to do something about it...or do we?

DUESBERG CAUSES A RUCKUS

Peter Duesberg, the head of the Department of Molecular Biology at the University of California Berkeley published a paper in Cancer Research in March of 1987, that set the Medical community on its collective head. Duesberg's article was an articulate, persuasive and scientifically accurate demolition of the notion that the AIDS virus was in itself a pathogen of sufficient virulence to explain the constellation of symptoms that is AIDS.

Without getting too technical, the gist of the argument was that the so-called AIDS virus violated all of the currently accepted tenets of modern virology, including Koch's postulates, and as such could at best be considered as no more than an indicator or co-factor in sera that may cause AIDS!

Apart from the prodigious egos that were threatened by this article, which to this day has not received a significant challenge and has not in any way been discredited, the billions of dollars that had been committed for research, not to mention jobs, reputations, pharmaceuticals, etc., were now being challenged by a renegade scientist with impeccable credentials. Virologists who were queried about Duesberg's work responded with a variety of nonsensical replies, such as "Oh, Peter's just being his cranky self", suggesting, I suppose, that a 21 page article with 278 references was written in a pique of irritation.

TREATMENT ISSUES

While all of the various and sundry debates about origin, characterization and virulence of the virus were raging, people continued to die with alarming regularity. The patient and the physician were confronted with a seemingly insoluble problem. No one knew what was going on, and conventional allopathic medicine did not seem to have an answer. This situation quickly gave rise to an alternative medicine underground which proceeded to try anything and everything as a possible remedy. Moving much more quickly than the entrenched bureaucracy of the FDA, CDC and other Government health agencies, victims of AIDS and practitioners of alternative health modalities quickly struck an alliance that gave rise to treatments that included: Azidothymidine, Dideoxycytidine, Ribavirin, Dextran Sulphate, AL 721, DNCB, Isoprinosine, Imuthiol, Aloe Vera, Monolaurin, Pentamidine, Alpha Interferon, Cyclosporin, Interleukin 2, Naltrexone, Peptide T, Hydrogen Peroxide, Ozone, and various Homeopathics, to name just a few of the major ones. Additionally, naturopathic treatments including herbs, mushroom extracts and nutritional supplements were tried and popularized in a book by Laurence Badgley. Others, like Dr. Immanuel Revici, worked exclusively on the lipid phase of the immune response.

And then, more off the beaten path were acupuncture, both traditional and electro-, and the various electronic modalities such as the accuscope/Myopulse, the Indumed, the Raythera, Radionics, the Lakhovsky Multi-Wave Oscillator (of which useful versions are apparently unavailable, in spite of claims for the junk being carried around in briefcases), and the piece de resistance, a so-called Rife frequency generator, which really does enormous discredit to the work of Royal R. Rife, and should really be called the Crane frequency generator to maintain historical accuracy. The evidence to date indicates that NONE of the above are an effective cure for AIDS!!

RUMORS

Rumors are abundant. Testimonials about cures are everywhere. This article is an attempt to put them into perspective. I have now been working with AIDS patients for over seven years and have little patience with the grandiose claims of individuals attempting to market a product to individuals they have never seen, for a disease they do not understand, with an instrument or product that they have not adequately researched. To my knowledge, no one has ever been cured by a testimonial. I have personally made available to my patients every one of the remedies/devices listed above, and then some, including substances banned by the FDA since the 1930's. Patients kept dying.

THE H FACTOR

It would be a great help if people who wanted to "cure AIDS" would do a little homework once in a while. Go to your local Medical Library and at least get familiar with Virology and with Epidemiology. Read about, and try to understand what people like Lakhovsky and Rife were trying to do, it really isn't so transparent that it can be understood in a single reading. Take the time to understand how the immune system works. Don't get your information from magazine digests or worse still, from TV news. Do the work yourself.

Having voiced my gripe, I am happy to report that some people have been doing their homework, notably Joan McKenna at the Institute for Thermobaric Studies in Berkeley. In a recently published article based on the medical histories of hundreds

of AIDS victims in the Bay Area, Ms. McKenna offers an entirely new and plausible scenario to the etiology of AIDS, and one that squares nicely with what Peter Duesberg has been saying all along. It appears that in individuals who are immune suppressed, the serology tests for syphilis are useless. That is to say, the AIDS virus makes a positive identification of syphilis almost impossible.

There have now been numerous reports in the medical literature of AIDS patients with a KNOWN HISTORY of numerous syphilis infections having negative serology for syphilis. This should not be possible. However, if it is in fact true, then we would have to contemplate the possibility of an epidemic not of AIDS, but of tertiary or late staging Syphilis confounded by a novel co-factor, the AIDS virus.

This is not as implausible as it may appear at first glance. Consider that in the early 1970's the formulation for Penicillin was changed from an aqueous Penicillin, which has a half-life in the body of only several hours at most, to Benzathine Penicillin which has a half-life of about one week. The advantages of long-acting Penicillin are obvious, particularly in the context of an office practice. Unfortunately, it has only recently become clear that Benzathine Penicillin has one major drawback, namely: it does not cross the blood-brain barrier. This means that the treponeme responsible for syphilis can find a safe harbor in which to lay dormant for many years: the brain and the inside of the eyeball.

As is now well known, so-called AIDS dementia is one of the early diagnostic indicators of AIDS. However, in a close reading of the literature on the clinical diagnosis of neurosyphilis, late-staging or tertiary syphilis, it becomes quite clear that one could just as easily be reading the diagnostic criteria for AIDS. Moreover, it is now known, and even the CDC concurs, that the time-honored treatment protocol of a single injection of 2.4 Million Units of Benzathine Penicillin is NOT AN ADEQUATE TREATMENT FOR SYPHILIS!

This suggests that since the 1970's all treatment for syphilis has been in dosages of subclinical effectiveness. Bear in mind that most of the physicians currently practicing medicine were going through medical school at a time when most people believed that venereal diseases including syphilis had been reduced to the status of minor irritations which could be remedied with a single injection. Thus, few of the present generation of M.D.'s have ever seen clinical cases of tertiary syphilis. This is a very important point, since late syphilis is difficult to diagnose even for an experienced pathologist. Consequently, it may in fact be that what we are fighting is not AIDS, but in fact a global epidemic of late staging syphilis due in part to the mistaken belief in the efficacy of Benzathine Penicillin.

The gravity of this situation was recently underscored by a paper published in the Annals of Internal Medicine, (1987; 107:492-495) in which the authors present evidence of an AIDS patient with a Kaposi Sarcoma who tested negative for syphilis on every serology test, including the "gold-standard" FTA-ABS test, which is traditionally the most sensitive test of last resort. It is a credit to the physicians involved in this study that they followed through on their suspicions regarding syphilitic involvement. Ultimately, only a skin biopsy of the Kaposi lesion combined with a very specialized Warthin-Starry silver staining technique, demonstrated the abundant presence of viable spirochetes of syphilis in the tissue. It is important to fully appreciate that the average physician would never go to these lengths to make this diagnosis.

OVERVIEW

The emerging picture then is this: we have seriously underdiagnosed and failed to identify late staging syphilis, which exists as a consequence of undertreatment of the primary disease with a penicillin variant that does not pass the blood-brain barrier, and we have almost total masking, for reasons as yet unclear, of diagnostic

serology for syphilis in AIDS patients.

Because Syphilis itself is known to be one of the most potent of all immune suppressing diseases, so potent in fact that both Kaposi's Sarcoma and Pneumocystic Carinii were first diagnosed in syphilis patients in the first half of this century. Since the AIDS patient does not die of the AIDS virus, but rather of opportunistic infections as a result of immune suppression it would seem to make good sense to thoroughly investigate this issue of possible syphilis. This is particularly true when working with the homosexual population, where the medical histories of individuals typically show a 5-10 year history of chronic inflammatory diseases, multiple incidence of syphilis, gonorrhea, hepatitis, herpes, intestinal parasites, chronic drug use both recreational and prescription, and a host of other diseases. Occam's Razor applied to the scenario outlined above would make the search for yet another etiological agent such as the AIDS virus superfluous.

The conditions for the disease we now call AIDS existed before we found the virus. The only thing the "new" virus will do is fund billions of dollars of unnecessary research into an unneeded product.

While at the present time treatment of AIDS with penicillin in this country remains controversial, it is becoming the treatment of choice in Europe, while here in the U.S., Dr. Stephen Caiazza of New York City is having excellent results with this approach. In a personal communication with me he indicated that prior to initiating penicillin therapy he had been losing approximately 200 patients annually to AIDS. Since initiating the treatment protocol for syphilis as suggested by Drs. Walthaler and Dierig of West Germany, he has had only one death, while doubling his patient load. Joan McKenna has indicated that M.D.'s in the Bay Area are experiencing a similar remission of symptoms with the protracted use of high doses of aqueous penicillin, which will pass the blood-brain barrier.

Because of the professional embarrassment and lack of money to be made by relabeling AIDS as tertiary syphilis or as its complication or co-factor, the Medical Establishment has been dragging its feet in making this information generally known. However, major medical journals, including the AMA Journal (1987; article by Dr. Mary Guinan of the CDC) are gradually beginning to publish this information. Whether the elimination of syphilis will also eliminate the incidence of AIDS remains to be fully demonstrated. It is however quite clear that the best anti-viral will not save you in the presence of underlying syphilis.

SUMMARY

We are presently beginning treatment of AIDS patients with penicillin and are seeing encouraging results. Nevertheless, my own prognosis for AIDS victims remains guarded as it is my impression that this is truly a multi-factorial disease that requires treatment on many levels, not just pharmacological.

From the perspective of a worker in this field, I find it regrettable that the predominant response by individuals and institutions of virtually every belief and persuasion to an unknown problem or threat like that of AIDS, is to "blame and shame". To me it makes little difference if you blame homosexuals for their "godless behavior", a la Jerry Falwell, or blame the World Health Organization, Dr. Robert Gallo or the medical establishment, a line of reasoning that is currently popular within the ranks of alternative medicine. Jerry Falwell's foolishness needs no comment, but as an advocate of alternative health care, I have to say that we have not done ourselves proud with this particular issue.

The volumes of mis- and disinformation that has been bandied about with respect to AIDS and other health problems by individuals simultaneously claiming to have an inside track on both spiritual development and technological expertise should be of great concern to anyone interested in real progress and freedom.

BACK TO BACH

By

Michael Theroux

The reader may well have noticed that in some of the journals of the past year or so, there has been mention of the musician Johann Sebastian Bach, but with little description of how he fits into "The Big Picture." Hopefully, I can reveal some interesting concepts concerning the nature of Bach's music, as well as insight into the fundamental properties of music itself.

Johann Sebastian Bach composed a number of great works in his lifetime, and was quite a famous organist and teacher, but to his contemporaries, the music he composed was considered difficult and old fashioned. Not until nearly two generations after his death was his music revived, and today he is regarded by many to be the supreme musical genius of all time.

"There was something operative in or upon him as a creative artist that was superior to his mind and intellect. It was a rapture essentially emotional in kind, a possession literally enthusiastic, that brought him face to face with God and filled him with a sense of the closeness of God. When this rapture seized him - and it seized him whenever his theme gave occasion for it - it lifted him to the production of music that is holy. He was not then the orthodox Lutheran. He was the Universal Man."¹

The mathematical intricacies employed in Bach's music were certainly not limited to his compositions, nor uncommon to the period, for the composers of the Renaissance and Baroque era were the discoverers of modern music theory and therefore architects of melody, harmony, and above all counterpoint. But with Bach's death, came the end of that era, and consequently, the end of experimentation in musical form.

One of the greatest forms of music, as mentioned above, is counterpoint. Counterpoint is the art of composing or playing a melody accompanied by one or more related, but independent melodies. Bach took this form to its greatest heights with the composition The Art of Fugue, his last actual written work. Today, counterpoint is a lost art due mainly to the difficulty of its composition.

Our main focus is the way in which Bach used counter-point. His melodies and counter-melodies gradually begin with the simplest of musical phrases and eventually flower into a mirror image of the powerful creative energies found in nature! For us to experience this we need only to listen to the music, but some of its fundamental properties may be interpreted on paper as well.

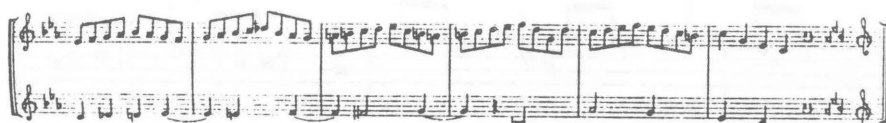
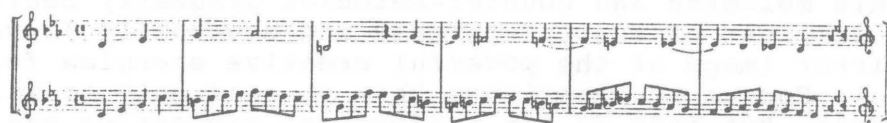
First, let's take a look at motion in music. With the single melody shown below, we can observe three distinct types of motion; ascending, descending, and advancing:



When another melody is added, the beginnings of counter-point come into view, but as we can see, there are still the three basic motions:



In the next example, we have what is known in music as a canon. The idea behind the canon is that one single melody, called the theme, is played against itself. What is interesting in this piece by Bach, (from The Musical Offering) is that it not only has advancing motion but also can be played backwards in time. This retrograde activity actually occurs simultaneously in time with the original advancing theme. (Known as a 'crab canon' from the way in which a crab walks) Now we have four types of motion:



The above displays a kind of oscillating energy but with only two dimensions which is why we now come to what is known in music as the inversion. This is to make a melody descend whenever the original melody ascends, or ascend when the original melody descends by exactly the same number of semitones. This turning of the intervals upside down creates motion within the piece of music, and Bach used it frequently in his compositions; especially the fugues.

A fugue is similar to a canon in that it is based on one theme but is not confined to the rigid structure of a canon. A fugue begins or enters with a single melody playing the theme. When this theme is finished, a second voice enters with the same theme usually raised a fifth or lowered a fourth, while the first voice continues with melodic contrasts to the theme, called the countersubject. This continues until all of the voices have entered and then there are no rules. Bach used all of the devices including augmentation, (note values doubled) and diminution, (note values halved) in conjunction with retrograde and inverted themes, to literally turn his music inside out. This dynamic display of artistic expression conjures up non-euclidean images of expanding and contracting energies obviously not found in any other music.



Were there more space, we might represent this on paper but I think a good listen to the music will reveal all that has been said. Music that recreates the motions of ascending, descending, going forward, backward, and upside down (the inversions creating the spiral), paints a three-dimensional glyph of living energy which when witnessed by the senses, needs no translation.

It must be emphasized that this not merely intellectual aerobics, for it is more often the subtle forms of art that will reveal the true nature of this living energy. The music of Bach and even the art of M. C. Escher (which one would do well to look at as he is closely related) can give us deeper insight into our studies of electricity, magnetism, our observation of plant and animal life, and even our perception of the ethers without any real effort. Simply listen, look, and learn, but most of all enjoy.

REFERENCES

1. BACH, by Eva Mary Grew and Sidney Grew. Collier Books, New York.
2. GODEL, ESCHER, BACH: AN ETERNAL GOLDEN BRAID by Douglas R. Hofstadter, Basic Books, Inc., New York.
3. A COMPANION TO THE ART OF FUGUE - Donald Francis Tovey. Oxford, New York.
4. A STUDY OF COUNTERPOINT FROM JOHANN JOSEPH FUX'S GRADUS AD PARNASSUM - Translated and edited by Alfred Mann. W.W. Norton & Co. Inc., New York.
5. AN ABC OF MUSIC by Imogen Holst. Oxford, New York.
6. THE EFFECTS OF MUSIC - Edited by Max Schoen, Harcourt, Brace & Co., Inc. New York.

SELECTED DISCOGRAPHY

- A. J. S. Bach: MUSIKALISCHES OPFER (Musical Offering), S. 1079 Vienna Concentus Musicus. Musical Heritage Society.
- B. J. S. Bach: THE ART OF FUGUE, BWV 1080 - Lionel Rogg (organ) Angel

THE TRANSMISSION OF ELECTRICITY, Part II

By Eric P. Dollard

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Part I of "The Transmission Of Electricity" (Sept-Oct 1987 JBR) dealt with the nature of electric transmission along space bounded by a set of guiding wires. These wires were found not to be the conductors of electricity, but space itself is the electric conductor. In reality the so-called conductor material of which the wires are made are reflectors of electricity, analogous to the reflective metal coating on the back of glass (dielectric) mirrors.

Because the dimensions of the co-efficient of dielectric induction, or farads, is given by the inverse of the square of the velocity of light,

$$1/c = t^2 / l^2 \quad \text{sec per cm} \quad (4\pi \cdot 10^{-9} \cdot 10^{-1}) \text{ farads}$$

the notion has occurred that these dimensions establish the propagation velocity of electric transmission, and thereby electricity and light are the same thing. This concept may have become the most significant obstacle to the understanding of electric transmission.

In this part of the study of the transmission of electricity the conduction of electricity of space will be further examined through observation of the characteristics of radio transmission and reception in the medium frequency range, 300-3000 kilocycles per second.

When the distance between the guiding wires of an electric system is significantly increased the electric field that is associated with these wires occupies a large volume of space which extends far beyond the vicinity of the guiding wires. The expanded electric field of induction associated with the spaced apart guiding wires now can combine with the electric fields of induction associated with more distant sets of guiding wires. This sharing of electric fields by two or more remote systems of wires is known as the mutual inductance of the systems. Through the process of mutual inductance electricity may be transmitted through space without the employment of a set of guiding wires to connect the transmitter to the distant receiver. Hence, the "wireless" system of electric transmission through space.

One example of such a system is the A.M. broadcasting service in commercial use today (535-1650 Kc/sec). In this form of transmission the guiding wires spread out into a very tall tower (75-300 ft) far into space on one side and a large copper screen buried in the ground on the other side of the system.

The spacing that exists between the uppermost part of the tower and the outermost part of the screen is very large, therefore the electric field of this system extends to great distances as a result of this spacing. As with any system involving an electric field of

induction energy is taken up by the field during one portion of the A.C. cycle and returned during the next portion of the A.C. cycle. If measurements are taken on the flow of energy at the terminals of the tower-screen arrangement it is observed that only a small fraction of the energy taken by the electric field is returned during the discharge portion of the A.C. cycle.

This loss of energy is unlike that which occurs in the oscillating energy exchange that takes place with closely spaced guiding wires. For close spacing the loss of energy is very small and that energy which is lost is fully accountable by the equivalent quantity of heat gain in and around the wires. However, for wide spacing the loss of energy is very large but the gain of heat energy is disproportionately small.

This direct observation of the disappearance of electric energy without its reappearance in an equivalent quantity of a differing form such as heat or mechanical activity raises a most important question, that is, where does all this energy go?

Many believe that this lost energy is radiated away from the tower in the same manner as light & heat radiation from a light bulb. While this theory seems plausible, there exists evidence that it may not be the correct interpretation of how the energy is lost. Nikola Tesla, the discoverer of radio, claimed repeatedly that the electromagnetic radiation theory (then known as the Hertzian wave theory) was inimical to the proper understanding of the wireless process as he conceived it.

The electromagnetic theory, or what was known as the Hertzian wave theory in Tesla's era, fails to explain certain observations made in practical radio engineering. According to E.M. theory the propagating velocity of electric induction must be the velocity of light. In the practical world of engineering however, the factor $\pi/2$, or 1.57 times the velocity of light will appear in wave calculations. Is it not coincidental that Tesla claimed that the effective propagation velocity of his wireless system was $\pi/2$ faster than the so-called speed of light?

Also, according to E.M. theory, the propagation of electric induction must be the cross combination of the dielectric induction and the magnetic induction, these two inductions never propagating independently. The work of J.J. Thomson & M. Faraday indicate that these two distinct forms of induction do propagate independently. Wheatstone claimed that the dielectric induction propagated at $\pi/2$ times faster than light.

In the practical world of radio engineering in the A.M. broadcast band it is not feasible to employ electromagnetic antennae at the point of reception. This is because an electromagnetic antenna must support a large fraction of the electromagnetic wavelength, this wavelength being several hundreds of feet. That is, such an antenna must be a tall tower. Since the employment of a tower for every radio receiver is an absurdity other forms of antennae are used. One such antenna is the magnetic permeability antenna found in transistor radios. This

antenna responds only to the magnetic field of induction and works on the principle that a ferrite core multiplies the effective value of space a thousand fold and thereby simulates a large structure. This type of antenna is found to be very directional and must be oriented perpendicular to the direction of the transmitting station. Another form of antenna is the electro-static capacity antenna found on automobile radios. This antenna responds only to the dielectric field of induction and works on the principle that a resonant transformer connected to an elevated capacitance counteracts the effects of distance and thereby appears close to the transmitter. This type of antenna is found to be completely non-directional and can be oriented in any fashion.

Neither of the aforementioned antennae operate on the principle of electro-magnetic induction as propounded by Hertzian wave theory, but on distinctly magnetic inductive propagation or dielectric inductive propagation. This is contrary to the notion that the magnetic & dielectric fields of induction are inseparable, that is, they must propagate co-jointly. This distinct separate propagation of these two fields of induction is how electric propagation was conceived by nearly all of the important electrical pioneers.

The question has remained unanswered as to where does all the energy go that the broadcast transmitter must supply to the tower if it is not radiated in a fashion similar to light or heat energy. The answer may be found in the statement of C.P. Steinmetz that it is consumed by the hysteresis of the aether in which the tower is immersed. To quote, "Mr. Kennelly says that air has apparently no hysteresis, and this is the general assumption, too. But nevertheless, in the light of modern science we must say that even air has a certain hysteresis, a time-hysteresis. For we know now, that the magnetic stress in air does not appear instantaneously with its source; but we know that magnetic disturbances are propagated through air with a finite velocity, the velocity of light. Now, if you examine the phenomenon more particularly, you will see, that then, and only then, no energy would be dissipated in space, if the magnetic disturbance set up at any place, were propagated through the whole space instantaneously. But as soon as the propagation of energy through space consumes a finite time, no matter how small this time be, a certain loss of energy must necessarily be connected therewith, and, calling the retardation of the magnetic disturbance behind the magneto-motive force, hysteresis, we must say: even air has hysteresis." (1)

The notion of aethereous hysteresis will be explored in part III of "The Transmission Of Electricity".

1. Transactions of the AIEE, Kennelly On Magnetic Reluctance, Oct. 27, 1891.

PLUS SLITS - MINUS SLITS

By Jay Christopher, P.O. Box 2851
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Astonishment will greet one who picks up a prism and looks through it as did Goethe when first researching his 'Farbenlehre' (Color Theory). Previous editions of this Journal explained the genesis of color as light's dynamic interaction with darkness (and matter). Looking through the prism, the open-minded seeker will note yellow, yellow-red, red or blue, indigo, violet depending on whether the prism "folds" light over dark or vice-versa.

Now the so-called "complete spectrum" is normally created by a narrow slit admitting both spectral "edges" together. Where they mix, blue and yellow create a vibrant green -- and the "appearance" of a complete "earthly" (physical) spectrum. This is what might be referred to as the 'plus' slit of light. Counter to this we might find an 'anti' or 'minus' slit exists. This "obstruction" to light's passage "manufactures" the etheric/counterspatial spectral phenomenon, consisting of red crossing violet in the center, creating a glowing magenta, above and opposite the earthly green on both Goethe's and Dinshah's color charts.

Central to existing optical theory is an amusing term derived from geometric models for light's action, namely "rays." (Actually, who's ever really seen a "ray" of light?) Slits and prisms both fold the "light body" as a whole entity, to create the dynamic effect known as color. Light meeting matter and being slowed by it to varying degrees is the real issue of what folds or "weaves" light and darkness, dynamically creating color. When a lens similarly admits the light body, its shape --whether convex or concave--determines how the light body is deflected.

Much the same as with a prism, color will result on the edges through the same dynamics of "folding light and dark." The degree to which this effect to fold the light body is annulled is the degree to which a fine lens delivers (manufactures) "accurate" color and is free of so-called "chromatic aberration."

From the above basics can one possibly imagine a model for the appearance of space and counterspace? Let's take a brief look at this here. Plus and minus slits will work as a lens in that a focal "line" will appear on the film, producing an image similar to "fun-house" mirrors. This so-called distorted (because our eyes use focal "points") image will look normal when focussed by a pinhole to a focal "point." (Normal, given a focal length also of similar perspective to how humans see.) In that point (or line) is folded (or woven) a complete and reversed image in every detail. Every point or line contains a potential "lens" to create a reverse image of the other side of it!

Several sources on homeopathy and color therapy report a reversal of therapeutic effects when a certain point in the potentization curve is passed (through the slit/pinhole darkly?). Is this demonstration of the folding or weaving of light and darkness by the light ether not a fair example of the intermixture of space and counterspace--right before our eyes?

Pursuant to the above line of thought, reverse spectrum imaging (photography) ought to work with minus slits and holes, possibly a line and a dot on a transparent slide or filter becoming reverse spectrum lenses, and creating counterspatial color phenomena. Experiments with the above are now in progress and the author would appreciate comments and suggestions along these lines of thought, which might contribute to developing or refuting these concepts.

REFERENCES

Brown, Tom - THE JOURNAL OF BORDERLAND RESEARCH, various 1987 issues, BSRF, CA
Goethe, Johann Wolfgang von - THEORY OF COLOURS, M.I.T. Press
Lehrs, Ernst - MAN OR MATTER, Rudolf Steiner Press, London
PINHOLE JOURNAL, Vol. 4, No. 1, Star Route 15, Box 1655, San Lorenzo, NM 88057
Proskauer, Heinrich - THE REDISCOVERY OF COLOR, Anthoposophic Press, NY

T. GALEN HIERONYMUS - Radionic Pioneer
November 21, 1895 to February 21, 1988

We mark the passing of Dr. T. Galen Hieronymus who was a true pioneer in the field of radionics. Dr. Hieronymus was a discoverer of unique attributes of the life force which he termed "eloptic energy". His work has stimulated continuing research in radionics. His patent No. 2,482,773 has become a standard concept which many radionic instruments have been built from, some using just the pattern drawn on paper. People with original thoughts are few and far between. Galen's presence on this earth has influenced many to look beyond the norm and Borderland Sciences Research Foundation honors a man who blazed a trail for others to follow. Rather than eulogizing, we present an important experiment from his patent for future researchers to work with.

Growing Plants in the Dark
by T. Galen Hieronymus

Radiations from each of the known elements of matter produce some form of energy, probably electrons which can be made to flow along electrical conductors. The flow from each of the elements having characteristics different from the others. Conversely, the flow of electrons along a conductor produces a radiation having characteristics of the radiation from each respective element.

Such of the known elements as are required to feed growing plants have been transmitted to the plants through metallic conductors as the plants were entirely isolated from the elements upon which they were fed. More precisely, seeds were planted in boxes in a darkened basement room.

One of the boxes of plants containing some of the seeds was used as a control and no apparatus for transmitting element radiations thereto provided. The remaining boxes of plants had electrodes or plates of conducting material mounted or otherwise disposed adjacent thereto, and each box of plants was separately attached to a conductor extending to a point outside the building where electrodes or plates were attached to the conductors and allowed to remain exposed to the light.

Such of the known elements as required to impart normal characteristics to the plants were apparently fed thereto by having the radiations of the elements from the light conducted to the plants through the wires and associated electrodes.

The treated plants were relatively healthy but the control plant assumed the characteristics of growing vegetation which has been deprived of the elements in natural light. Particularly was the control plant devoid of chlorophyll while the remaining plants were green.

Dr. Hieronymus' work will be carried on by his wife Sarah and their co-workers at Advanced Sciences Research and Development Corporation, PO Box 109, Lakemont, Georgia 30552.

HOW CRESS SEEDLINGS RESPOND TO LIGHT AND "FEEDING"

By Simon Martin, 140 Addison Road,
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ABSTRACT: Cress seedlings grown in daylight leant towards the source of the light. Seedlings grown in the dark grew longer on average, and did not lean in any particular direction. Seedlings grown in the dark and watered with extremely diluted commercial plant food grew longer still, while cress seedlings placed in material plant food failed to germinate.

Objective: To find out whether light is essential for the growth of plants, by

- 1) Comparing the growth of cress seedlings kept in the dark against those in the light;
- 2) Seeing whether seedlings "follow" light; and
- 3) Comparing the growth of cress seedlings kept in the dark and given two different versions of natural-source plant food composed of a balance of nitrogen, phosphorus and potassium.

Procedure: As outlined in the instructions, but with the addition to two more saucers to test the outcome of adding plant food.

The food used was "Back to Nature" commercial food produced by Pan Britannica Industries Limited. It is a mixture of entirely organic and natural ingredients, including manure, bone meal, bone flour and seaweeds. The mixture contains nitrogen (N), phosphorus pentoxide (P2O5) and potassium oxide (K2O) in a balanced ratio of 7.3:5.0:5.2.

In one saucer, one dessertspoonful of this food was taken straight from the packet and sprinkled on two thicknesses of paper towel. This was then folded over to make a "sandwich" of plant food with two thicknesses of paper on each side. The cress seeds were sprinkled on top and watered like the others.

Another saucer of cress seeds was prepared according to the instructions, but instead of being watered with ordinary tap water (as the rest of the seeds were), in this saucer they were watered with "homeopathic"* plant food in a "5x" dilution.

This was prepared by taking one dessertspoonful of the plant food and mixing it with one pint of water. Nine-tenths of this liquid was discarded, and the remainder was topped up to one pint and vigorously shaken. This procedure was repeated another four times.

The resulting liquid was used to water one saucer of seedlings.

* Homeopathy is a system of medicine developed by the German physician and chemist Dr. Samuel Hahnemann (1755-1843) and still in use today. One of its main principles is the use of remedies of vegetable, mineral, animal or human origin that are extremely diluted with water and alcohol.

Many of the most effective remedies today used by homeopathic practitioners are diluted beyond the limit at which it is accepted that a single molecule of the original substance can remain (Avogadro's Limit).

Homeopathy maintains that the vigorous shaking, or "succussion" applied in the preparation of these substances "potentises" the material in some way as yet unknown.

One explanation, proposed by Drs. Robin and Sheila Gibson of the Glasgow Homeopathic Hospital, is that the energy of succussion imposes a pattern on the otherwise seemingly random arrangement of molecules of water (H2O) (1).

Trevor James Constable has suggested that plants are better able to take up nutrients if they are supplied in "homeopathic" form, because they are less dense and heavy and do not need any further breaking down, or "digesting" before becoming available for the plant to take up (2). Constable proposed testing this hypothesis with germinating seeds.

Results:

The seedlings were examined after 14 days.

1) Seedlings grown in light.

These were the healthiest looking of all, with dark green petals and greenish-white stems that were whitest at the tissue paper. This crop showed a marked leaning towards the light, ranging from 10° to 50°. The angle of lean was greater the nearer the seedlings were to the light. Length of seedlings varied from 2.5cm to 6.5cm, averaging 5.1cm. 8 "roots" had penetrated through all four layers of tissue paper to the saucer beneath. One of them was 4cm long.

2) Seedlings kept in the dark.

These had yellow petals and white stems. There was no discernable leaning in any particular direction. Length of the seedlings varied from 3cm to 6cm, with an average of 4.7cm. No "roots" appeared to have penetrated the tissue paper.

3) Seedlings exposed to light from one direction.

Colouring was similar to group 1, but less distinct. The green of the petals was slightly lighter, and the stems were only tinged with green near the petals, becoming white approximately 0.5 cm (on average) away from the petals. When uncovered they were not leaning towards the light, except for a small cluster of seedlings at the very mouth of the slit. These were leaning towards the light at angles between 10° and 40°, which was less pronounced than the leaning of the seedlings grown in full light.

These seedlings ranged in length from 3cm to 5.5cm, with an average of 5cm. This is almost the same average length as the seedlings grown in full light, but with noticeably less range of growth.

Five "roots", one of the 3cm long, had penetrated the tissue paper to the saucer.

4) Seedlings kept in the dark and watered with "homeopathic" plant food.

Bright yellow coloured petals with white stems, these were not only noticeably longer than the other seedlings, but also had grown more uniformly straight. Length ranged from 2.5cm to 8cm, with an average of 6.1cm.

Six "roots" had penetrated through all four layers of tissue to the saucer beneath.

5) Seedlings kept in the dark and grown with plant food contained in the tissue paper.

These seeds failed to germinate. They were still brown in colour and were soft. Some of them had mould on them. The fertiliser underneath was completely covered with grey-blue hairy mould and there were mould spots showing through the upper layer of tissue behind the seeds.

Summary table:

How Grown	Average length of seedlings	Range (cm)	Roots penetrating	Degree of lean
In light	5.1	4.0	8	10-50
In dark	4.7	3.0	0	0
With slit	5.0	2.5	5	10-40
Diluted food	6.1	5.5	6	0
Straight food	0.0	0.0	0	0

Discussion/conclusions: Plants, or at least seedlings, do not need light to grow.

The experiment surprised me on three main counts. I thought the seedlings grown in the dark would turn out to be much longer than those grown in light. I expected the seedlings exposed to light from one direction to lean towards it much more obviously; in fact the seedlings grown in full light showed more lean. Thirdly, I did not expect the seedlings grown with plant food to fail so spectacularly.

Some of these effects may have been caused by the density of the seeds. I should have used exactly the same amount for each saucer, instead of approximating, and I should have arranged them on the tissues in a pattern that allowed adequate space and stopped "clumping".

Why did the seedlings placed on a "sandwich" of plant food fail to germinate? By the end of the experiment mould was growing on the plant food. Perhaps the moulds released substances that poisoned the seeds. It seems that the mixture contained in the tissues held too much moisture. This was worsened by this particular saucer being farthest from the radiator and also suffering by a huge pile of books and papers which progressively grew during the experiment, ultimately blocking the other source of heat - the modest amount of winter sunlight that was falling on the other saucers.

While the "homeopathic" sample grew the tallest, the healthiest looking plants were the ones grown with access to light. And of these two samples, the greenest were the ones given full access to light. Is this because the seedlings were able to produce chlorophyll?

These seedlings were also the most vigorous, judging by the number of "roots" penetrating through the four layers of paper towel. However the resistance of the towel is not constant, varying with the amount of water used, for one thing.

Although it seems that all the nutrients required for growth are contained in the seeds, I can't help wondering how the "greenness" of the seedlings relates to the relative amounts of nutrients available to promote human growth. For instance, I would like to be able to check the nutrient contents of the homeopathic seedlings and the green ones (for vitamin C, for example).

I was surprised that the seedlings exposed to light from one direction showed less "lean". I made the slit a full centimetre (1cm) wide rather than the suggested 3mm-5mm wide, but I would have expected this to improve the chances of the lean showing up, since a smaller slit would be likely to become blocked by the seedlings growing closest to it. This could easily be checked by repeating the experiment with smaller and larger slits in the containers.

The seedlings grown in full "light" were actually given a mixture of light from moderately dirty glass windows and/or from electric light bulbs received through a clear plastic cover which itself had a slightly blue tinge to it. In no sense could any of this light be described as full-spectrum, and it would be interesting to grow seedlings in a variety of lighting conditions, ranging from daylight with no glass or other material in the way, and (say) red light, blue light and "electric" light.

References

1. Homeopathy for Everyone by Drs. Sheila and Robin Gibson (Penguin, 1987)
2. Constable, T.J., "Fine Forces and the Plant", Journal of Borderland Research, Vol. XLIII, No. 2, March-April 1987.

IS PSYCHOTRONIC PEST CONTROL POSSIBLE?

By William S. Peavy, Ph.D.*

For years, I have worked as a consultant to growers fighting a continuous battle with pests: weeds, insects and diseases. I am trained for and experienced in how to solve crop and soil problems by conventional methods as well as some unconventional ones. I do not recommend to clients practices which are not proven. To be proven, they must have shown themselves to work during a good, objective field testing program.

So far as I can tell, psychotronics is an interesting and even exciting possibility but not yet proven. I've yet to see any good, hard data to prove its claims. I would welcome the opportunity to objectively test agricultural psychotronics.

What is "psychotronics"? Peter Kelly defines it as "the interfacing between mind (the operator) and matter (that which you are attempting to affect) using a specially designed Psychotronic Tuner." According to Dr. Tiller in the De La Warr Newsletter of Summer, 1972, "Radionics...deals with the interaction between mind and matter..." So it appears to me that "psychotronics" is just modern terminology for, and the same thing as, "radionics".

Crop problems are much like human problems. There is a thing called prevention but it is generally ignored until a crisis develops. Now if a grower is to pay off his mortgage we must get a cure when a bad problem shows itself. And one that is effective, quick and cheap.

Nearly always, chemical control meets the three needs. Quick, easy and cheap. And sometimes not so cheap. Chemicals for pest control have their undesirable side-effects just as drugs do in humans. But if you have a \$100,000 crop loan you will look for a quick fix just to survive. Then worry about consequences later.

Chemical pest control leaves bothersome residues. Maybe the use of subtle energy would be effective yet not leave these residues. The question is, how effective is subtle energy in combatting pests?

How could subtle energy kill bugs? Orthodox science knows little about this but maybe it is not the molecules of pesticide that poisons the insect but the radiant energy of those molecules. If so, what if we can radiate the insects with an energy similar to that of the pesticide? This might kill the insect by radiations.

But how to get the radiant energy out into that particular field with all those billions of bugs? The usual way to transmit energies to the farmer's field (or treatment area) is by use of a recent photograph. It needs to be only hours old so a Polaroid camera is usually used. You will need use of an aircraft to fly over the field for an aerial photo. The emulsion on this photo will connect you and your subtle energy device to the field. The photo's radiations will be the same as those of the field.

It is claimed that if you mix up the proper formulation of the proper pesticide and spray or smear this mixture on the aerial photo, then you can psychotronically transmit the killing "vibes" of the pesticide to the bugs in the field.

* Dr. Peavy was formerly a vegetable specialist with Texas A&M Extension service before his retirement. He is author a book on soils, and now a private agricultural consultant living near Portland, Oregon.

Take aphids for example. Diazinon is very effective in killing aphids by spraying on a mixture of say 1 teaspoon per gallon of water. You would mix it this way, then smear it on a photograph of the aphid-infested field, then transmit subtle energies to the field by psychotronics.

Another serious pest of farming is the weed. Can weed control be done by the photo-smearing process and psychotronics? Take onions, for example. A client called me recently to ask if he could take out the weeds in his onion field psychotronically. It was too late for prevention. He was in a severe crisis and needed a cure quickly to save his crop. All I was able to do was to discuss some possibilities with him. He probably needed a good, post-emergent weed killer like "Goal" which is a selective broadleaf herbicide. Properly applied, it will selectively kill the weeds but leave the onions intact even though all plants in the field get the spray. But if you mix up too strong a solution you kill both weeds and onions. If you spray it on at the wrong time you can kill onions. The same rules should apply psychotronically. The only difference is that with one you apply the spray by physically covering the leaves of all plants in the field. The other way, you transmit subtle energies of the spray solution.

Can psychotronics be used for prevention of pests, diseases and weeds? Perhaps so. It is thought that insects and diseases are attracted to an area where unhealthy plants are broadcasting certain frequencies. The same idea as what causes vultures to flock to a dead carcass. The carcass is giving off odors detected through smell by the vultures. The sick plant is giving off subtle energy signals that guides pests to the farmer's field.

Peter Kelly says the new psychotronic approach is to prevent a field from broadcasting signals that attract pests. He suggests psychotronically testing and treating soil, seeds and fertilizer. But the same old question remains: where is the hard data from controlled, field experiments to prove these methods work, if so, how well?

***** finis *****

CLIPS, QUOTES & COMMENTS

"FIGHTING FIRE WITH FIRE. Grinding up bugs in a blender with water and spraying them over plants could revolutionize insect control and save farmers millions of dollars, according to an article in 'Organic Gardening and Farming' magazine. The technique, suggested by a 1972 U.S. Department of Agriculture entomologist, was tried by a Florida peanut farmer who had been spending \$2000 a year on chemical insecticides. He collected a half-pound of pests, ground them up, sprayed them over his 74 acres, and reported that dead bugs fell off his vines within a few days. The farmer doubled his peanut yield, leading his county with 5,300 pounds per acre. Just why the method seems to work isn't known, but it's a biological axiom that no organism can survive in an environment composed of its own waste products." From THE SPOTLIGHT, Nov. 15, 1976.

This brings to mind an account given by Trevor Ravenscroft in his "Spear of Destiny" concerning Rudolf Steiner who used an almost similar method to rid the estate of a German nobleman that was being over-run with rabbits. According to the book Steiner was quite successful.

THE FUNCTION OF THE PROTECTIVE SKIN

by Rhetta and Walter Baumgartner

The earth is a living organism, in which the same life processes are operative as in plants, animals and human beings.

The human body's largest organ, most active excretion channel, hardest working temperature regulator, most delicate sensor and yet toughest protector is our skin.

Our skin is a complex veneer of organized layers. An average square centimeter of skin houses 100 sweat glands, 12 feet of nerves, hundreds of nerve endings, 10 hair follicles, 15 sebaceous glands, and 3 feet of blood vessels.

The skin contains more than 2 million pores to act as exit points to rid the body of water, salt and other waste products - about 500 grams worth each day!

An awesome network of nerve receptors enable the skin to respond instantaneously to touch, pressure, pain and temperature. There are 1,300 nerve endings per square inch of your fingertip; the only parts of the body more sensitive to touch are the lips, the tongue, and the tip of the nose.

Our skin is an intelligent protector and regulator. When the skin responds to a drop in temperature, it automatically causes muscles to shiver (to produce more body heat) and surface blood vessels to contract (to reduce heat loss). The skin also acts as the body's alarm system - its immediate sensitivity to pain alerts the brain to the presence of something that could potentially harm other parts of the body.

It is sad that biologists do not recognize the analogies of the Earth's processes and our human body. Think for a minute on the parallels - our Earth has all the processes: a circulation system, with blood and lymph, pulsing rhythm, a breathing process, a digestion and elimination process, a skeleton - a birth, life and death.

The soil of the Earth serves the purpose of our skin. We know very well what it means, and suffer great pain, when even the tiniest part of our own skin gets injured or torn off. Destruction of larger pieces of our skin leads to death. If one third of a human's skin is damaged, destroyed or removed, he is doomed to dehydration and death. Nature makes no exceptions.

The gigantic deskinning operations undertaken in the U.S., Africa, India and South America have enlightened us to just how quickly man-made deserts can be created.

Similarly, deep and fast ploughing is dangerous. Our present methods of tilling and cultivating are gravely damaging the skin of the Earth every year anew. Apart from other ill effects, it upsets the organised different layers of the soil. Each stratum has its own biologically congenial bacterial population, which is indispensable for growth and filtration.

If we stop and think for a moment, that in a mere thimble full of top soil (humus), there live more micro-beings than there are people on the entire surface of the Earth, we might perhaps grasp the phenomenal extent of man's wholesale technological destruction being inflicted on every conceivable living level of his Planet.

The Earth forms on its surface an intangible border zone. Below this layer lies the zone of negative tension. Above it is the field of positive tension and in-between these two tension fields the neutral zone. That girdle contains a filter or subtle network, which, when intact, lets pass radiations of the highest quality only, whether these be emanations from the cosmos or the geosphere.

It is known by Toxicologists that humus and the natural inhabitants of the soil (earthworms and micro-organisms) "clean up" the soil by processing it and extracting (digesting or chemically binding) PCBs, heavy metals and toxins not suitable to be released freely into the "life-supporting stratum" from plants and animals. This border zone thus acts as filter and protector of life. Yet, year after year, this filter gets torn up violently through reckless ploughing and deforestation projects. The soil is then left prone to wasteful discharge of its precious energies. Infiltration of radiation of inferior quality follows and this interferes with the sound process of growth. As a result, structures gradually tend to loosen up and acquire excessive dimensions. so that cancer-like diseases appear on trees and plants. These pathological deformations resemble those of human cancer patients.

Every year anew, the Earth is forced to heal and rebuild its protective border-stratum, together with its intricate filters and for this purpose it makes use of metallic substances mainly stored in old, dropped off foliage. Were we able to extract all the metallic values contained in plants and foliage we would be amazed to see that Nature is incessantly producing various metals and that our entire vegetation is actually a unique, huge metal factory. However, owing to our present fertilization and harvesting methods, not enough of these substances are returned to the soil, hence the lost trace elements must be replaced otherwise.

Old peasants, who still had a close personal relationship with the soil, were aware of its genuine needs. They, for instance, fought hard to be granted special "Cutting Rights", e.g. an entitlement (in Austria) to cut in forests for their own use the fresh shoots of needle-shaped trees. These were finely chopped up and spread over the fields in spring. By this means, the high-quality metallic and mineral substances contained in the twigs of these trees got back into the soil.

Another old custom was the "Clay-Singing". In a large container a particular kind of clay was gradually stirred into a cooling off water - which implies that it had to be done in the evenings. This clay was highly absorbent. The tonal scale was sung closely above the surface of the water. When stirring clockwise, the scale was sung upward and when stirring anti-clockwise, it was sung downward. The actual purpose of this old custom was to mix the exhaled carbonic acid with the absorbing clay. In the spring these vessels were taken to the fields and their contents spread onto the soil by big fans made from leaves, similar to the performance of priests, when they bless the land. Through this, too, metallic substances were deposited into the soil, to replace the border skin. The great Naturalist, Victor Schaubberger, sought out practitioners of some of these old customs to find out why they were carried on. He found their value after understanding the stratum functions of the soil. These metallic substances build a stratum of several layers, superimposed on each other, to act as a filter. The better this filter functions, the less energy of an inferior kind is able to penetrate. Hereby, our wise Nature had provided a selection-process similar to that operative in higher species' skin.

Qualitatively lower manifestations are thus eliminated from reproduction. Nature imposes inexorable laws, designed to sustain species and increase quality and man is entrusted with executing this Will. Only when doing so, will he be blessed.

We will explore the functions of the different layers of the soil and the natural "Selection Process" of Nature in future articles in "CAUSES".

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RECENT SIGHTINGS OF UFOS AND A LAKE MONSTER IN ARGENTINA

By Jorge Resines, Mar del Plata 1055
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Translation from the clipping "Objectos Voladores en Capilla del Monte", from "Clarín", January 23rd, 1988, Buenos Aires.

"FLYING OBJECTS AT CAPILLA DEL MONTE"

"Province of Cordoba (from the Agency of Clarín): The neighbors, more worried about Capilla del Monte's tourist promotion when they are in the midst of a season considered successful by the large amount of visitors to the provincial territory, yesterday morning (January 22) called by phone to LW1 Radio Universidad de Cordoba, Mr. Carlos Iturrio, director of the low power-broadcast Radio Capillense, to inform that the night before (January 21), at 23:55, over one zone of the Uritorco mount, the highest of the Small Mounts, could be seen an intense luminosity--from orange to yellow reddish. When watched through binoculars it was seen to be composed of five beams of light moving in all directions and that were attributed to the presence of UFOs--one or more of them--in the area.

"The statements of the radio director were corroborated by the former municipal official of Capilla del Monte, Mr. Jose Suarez, who said he had united 30 people who watched the phenomenon from a place located one kilometer far from the road that leads to the beaches (on lakes and small rivers) of La Toma.

"The witnesses stated it was a spectacular scene that could be appreciated for at least 2 hours. They added that the zone where the sighting was made is close to the oval figure, with a radius of 190 meters, formed upon the ground in 1986 by the grass burned after the appearance of some 'spatial airships' sighted also by the people of the zone. As it is known the grass grew again there and, paradoxically, a green circumference was left when a wood fire affected the outer side of the circle. This 'green spot' in the midst of the burned-out field was photographed and the photo published in the newspaper 'La Vox del Interior', together with the 1986 photo when the sector was seen with the grass burned in the midst of green vegetation.

"During 1985 excursions occurred from the capital of Cordoba (Cordoba City) and the populations from the Valley of Punilla towards Capilla del Monte of those who wanted to see UFOs" (END)

After this news was published here, Channel 9 of Buenos Aires city dispatched a team to film what had happened at the Uritorco mount and they showed on TV a large (30 feet in diameter) burned spot upon the slope of the mount, but the marks associated with the pressure of the landing tripod common to saucers were not visible, which makes me think that the ship hovered over the ground without landing. Usually I do not watch Channel 9, for it is the worst kind of thing you can ever see in TV here (which by itself is very bad), but I did it to report what happened at the place.

Translation of "Extrana Luz en el cielo de la localidad santafecina de Bigand", from "La Nacion", January 26, 1988.

"STRANGE LIGHT AT BIGAND, PROVINCE OF SANTA FE"

"ROSARIO - The whole neighborhood of the town of Bigand, located south of Rosario, is shaken by the repeated appearance of a strange light in the local skies. In fact since some time ago, it is possible to observe, about 22:00, the motion of a light with changing colorations.

"The luminous mass, predominantly yellowish red, moves in the direction N-NW and even is seen under the cloud layer during the nights it threatens with rain. The neighborhood, where attention oscillates between amazement, indifference and a vague fear, has multiplied the theories about the phenomenon's origin. There are those who state it is a UFO, others claim that they are experiences created by utopian international institutions.

"However, reality seems to be far more complex. According to the director of the astronomical observatory of the Cristo Rey college, the priest Rogelio Pizzi, the light has an astral origin. In declarations made to the news agency Telam, Father Pizzi said: 'I believe it is planet Jupiter, which is in its moment of approach to the Moon and is, therefore, very low over the horizon.'

"'Jupiter' - he said - 'is the brightest star of the skies and its light can refract in the atmosphere in the manner we see now.'" (END)

Some days after this article was published, my sister heard on the radio (she was at that time at Mar de Ajo, province of Buenos Aires, on her annual summer holiday) this very priest stating it was 'planet Venus' instead of Jupiter. The problem is that Venus is visible at the WEST this time of the year and at about 22:00 its right ascension is close to 50 degrees sexadecimals!

Translation of "Siguen los OVNI's en Cordoba", from "Clarín", February 2nd, 1988.

"MORE UFOS AT CORDOBA"

"Cordoba (Clarín) - Oscar Acosta, driver for the bus firm of Cotil, told the local afternoon newspaper "Cordoba", that he sighted 'for over 4 minutes an UFO close to Capilla del Monte', adding that it hovered over his vehicle (internal number 11 of Cotil) issuing 'flashes of red light'.

"Acosta commented the appearance of the UFO was about 3:30 AM over route N38, close to the town of Dolores, three kilometers from Capilla del Monte: 'The UFO' he said 'was from a color that went from pale yellow to orange, growing in intensity until reaching reddish and was in the direction towards the river Calabumba'. The driver indicated the Cordoban newspaper, whose headline read 'UFO PERSECUTES A BUS', that the object advanced towards the bus making a kind of buzzing sound until it stopped several meters away. At that moment the vehicle was illuminated 'in red color and the light seemed to be everywhere as if coming out of the seats' reported Acosta.

"Besides, the luminosity was not the only thing that happened, for when the UFO was over him, Acosta stated he felt the temperature increased considerably until 'becoming difficult to tolerate'. This did not last long and the object disappeared, but not before having made several maneuvers. Oscar Acosta travelled with a female passenger who stated that 'the driver called me but I could not move from my seat'. Also the phenomenon had been sighted by one of the

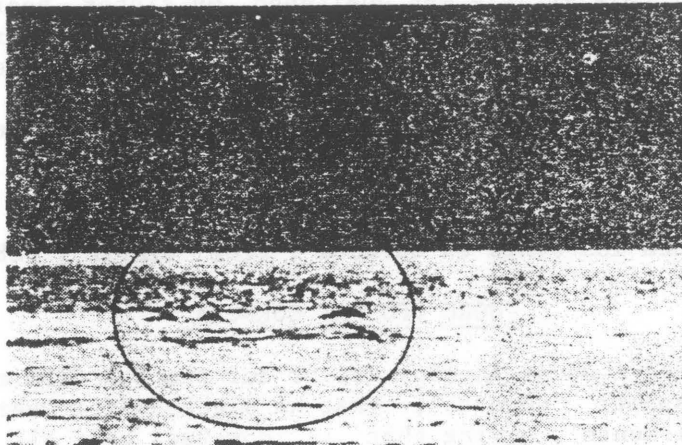
nightwatchmen of the bus of the bus terminal at Capilla del Monte, named Mr. Pable Molina, and a couple of surname Madea, that came home after playing bingo." (END)

Now comes the story of "Nahuelito", which is no more than the local rival of "Nessie", but as we are an underdeveloped country and far from all places, it is difficult here to mount an expedition in order to ascertain whether "Nahuelito" exists or not.

Translation of "Un monstrua en el lago", from "Clarín", February 3rd, 1988

"A MONSTER IN THE LAKE"

"The story begins on Christmas day in 1986 when Mr. Guillermo Barzi obtained a photo after having sighted 'something queer' in the cold waters of the Nahuel Huapi lake. The second visit came in November 1987, when a group of workers from the Bariloche Atomic Center coming home in a bus saw 'a large back emerging from the waters and advancing at great speed'. Last Friday and Sunday (January 20th and 31st) it appeared again and there were plenty of witnesses: employees from ENTEL (the government owned telephone company), wood firefighters and tourists walking by the lake.



"Photo inset: The 'monster' of Nahuel Huapi lake, according to the photograph of Mr. Guillermo Barzi, on December 25th, 1986, now appeared again before many witnesses but without any photographic camera at hand. The mysterious inhabitant of the lake was seen last Friday and Sunday (January 29th and 31st).

"They say they saw it and we must believe them, they say: 'We saw a large motion of water, a wake in 'V' shape cutting the surface of water and behind of it plenty of bubbling and sort of dark fins, as of dolphins or sharks, at one end appeared a large head, similar to the one of a large serpent'.

"It was only some days ago and in front of San Carlos de Bariloche itself that the sighting occurred in the Nahuel Huapi lake, a water body of 557 square kilometers in surface and up to 500 meters in depth, located 764 meters up from sea level. The news spread fast and it was recorded within the memory of people, by the side of other appearances of the monster that are on record."

"A BRIEF HISTORY: The story of the Nahuel Huapi monster - a sort of 'poor relative' to 'Nessie', the elusive inhabitant of Loch Ness at Scotland - is certainly brief. The first installment is recorded on December 25th, 1986, when Mr. Guillermo Barzi admitted to have sighted 'something queer' over the lake's surface. Barzi was with his family on a boat and all of them, 8 people in total, saw the waters move and a black and confused shape appeared at the surface, his rapid reflexes allowed him to photograph it and from the photo can be deduced that the 'monster' measured some 15 meters in length (about 50 feet).

"The second visit made by this mysterious inhabitant to the people of the zone was on November of last year. Then, a group of workers from the Bariloche Atomic Center that returned the city in a bus sighted 'a large back that emerged from the water and advanced at great speed, leaving a wake'. The sighting was corroborated by some 30 people that rested at Playa Bonita (Beautiful Beach). It must be told that it was a calm day and under full sunlight.

"Last Friday (January 29th), the mysterious visitor was again seen. This time it slid some 200 meters from the shore, in front of the city (San Carlos de Bariloche) itself; a group of wood firefighters, employees of ENTEL and people walking along the shore, were witnesses to the motion. This time it did not wait for long to appear again: it returned the next Sunday (January 31st) minutes before 8 PM (note: During summer, here, it is night only by about 9 PM, so there was plenty of light by 8 PM). It was an afternoon without wind, and almost hot, and many tourists could sight it when it came out suddenly from the waters to disappear almost at once.

"Everything seems to indicate that 'Nahuelito', if we can call it that, does not want to be relegated into forgetfulness, and that with its more frequent appearances, pushes to become incorporated into the gallery of famous monsters to which only a few privileged ones accede in the meantime: 'Nessie' at Scotland, the 'Yeti' at the Himalayas. The marine monsters in all places, they are part of said gallery, that imaginary museum that makes sleepless biologists, investigators and adventurers.

"It is a pointless discussion whether these appearances are a portion of myth or of reality. Believers and skeptics alike have a position taken and nothing to discuss, as the sirens chanted by Homer in the 'Odyssey', and other fantastic animals that deeply moved the Greeks, after a time the difference between reality and fantasy has merely the thickness of a book page. This is particularly true because of the frustrating results in the expedition made late last year to capture 'Nessie', which, despite speaking from the pedestal of science, could not end the myth." (END)

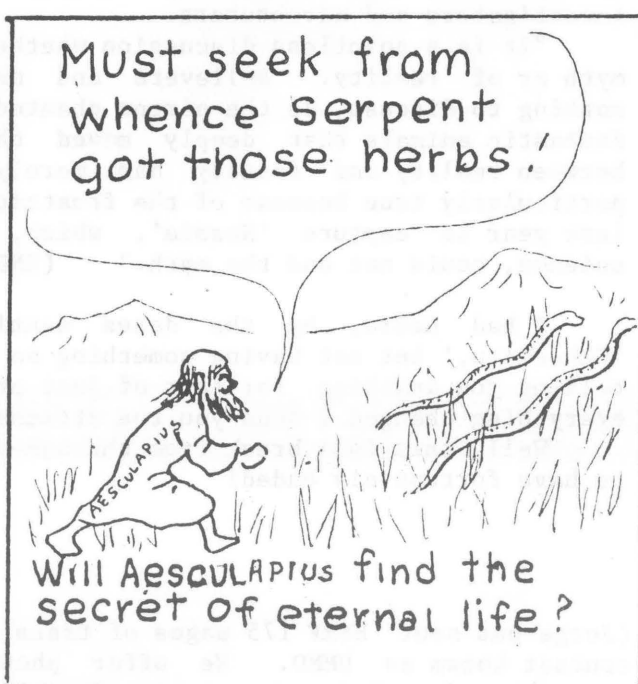
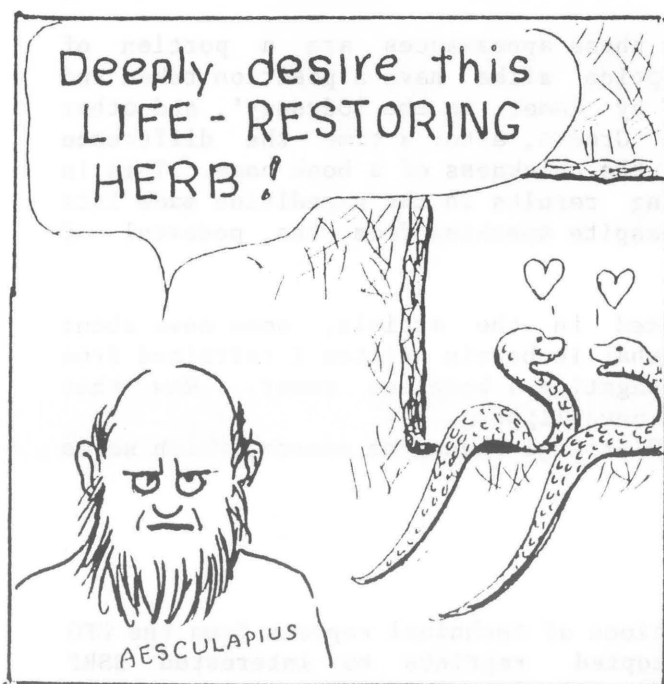
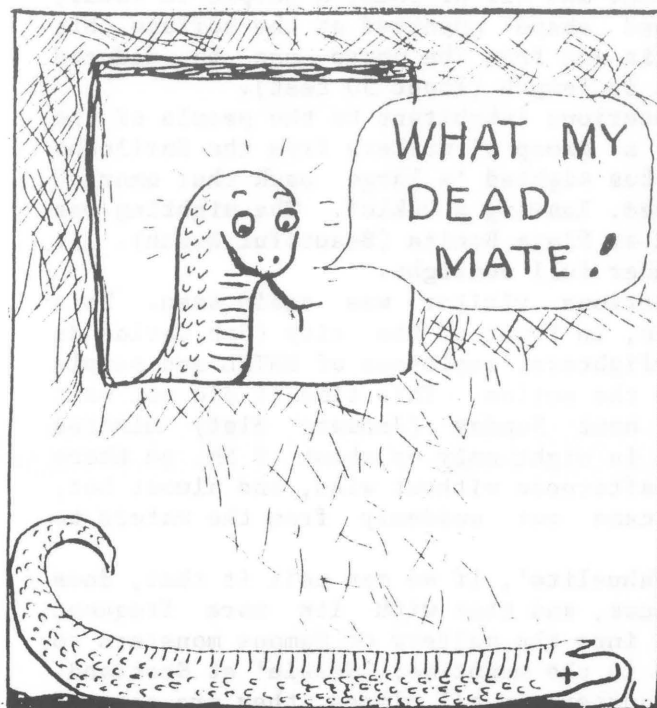
I had heard, by the dates mentioned in the article, some news about 'Nahuelito,' but not having something as what is herein written I refrained from telling you anything for fear of just propagating a baseless rumor. Now that everything changed I send you the attached newsclipping.

Well, this is a break from the non-UFO/Strange Phenomena season, which seems to have fortunately ended!

(Jorge has sent BSRF 175 pages of translations of technical reports from the UFO contact known as UMMO. We offer photocopied reprints to interested BSRF Associates for their researches for \$20PP, \$25 air. This material is being released for scrutiny and evaluation, and not for any endorsement of content. Jorge has done an excellent job and we thank him for all his input to BSRF.)

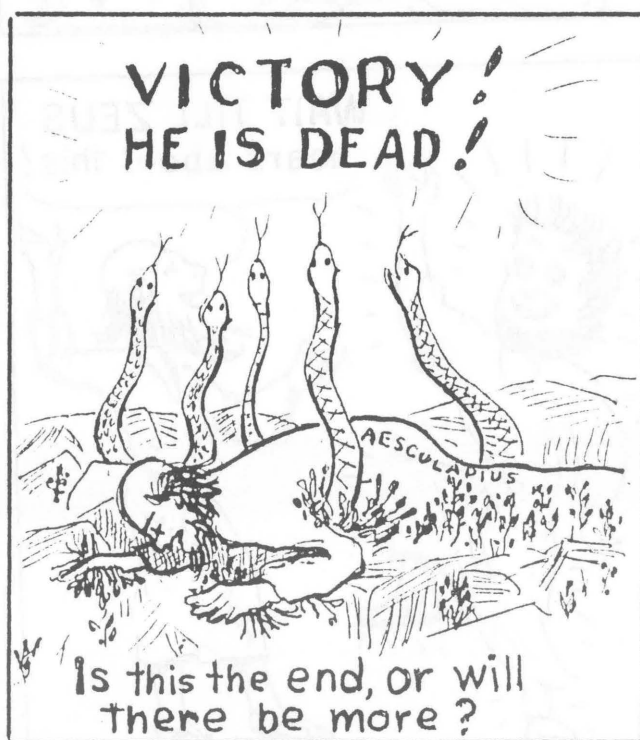
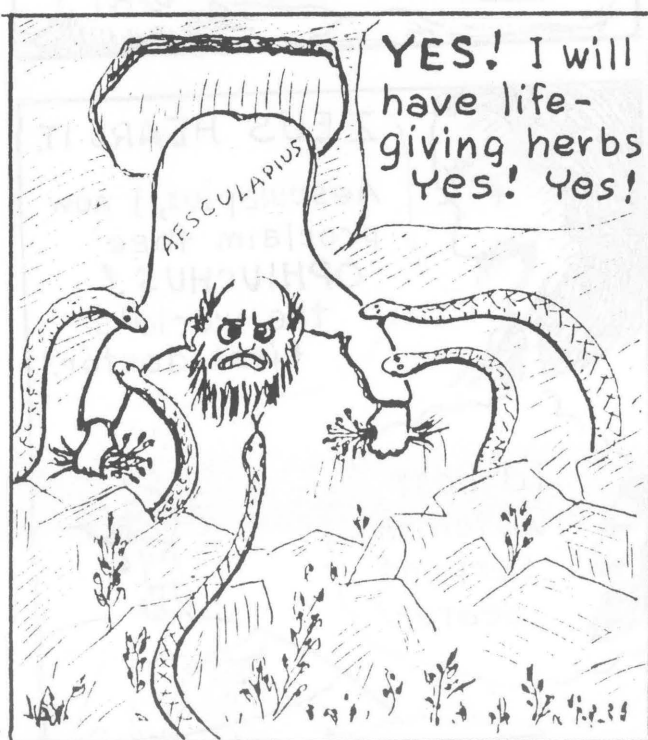
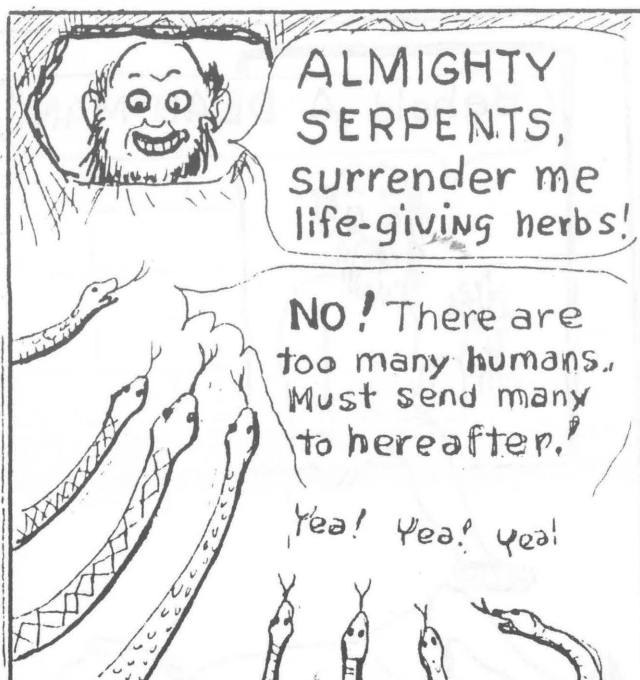
THE STORY OF THE 13th ASTROLOGICAL SIGN

As told by Dr. W.G. Reimer and Art Yensen



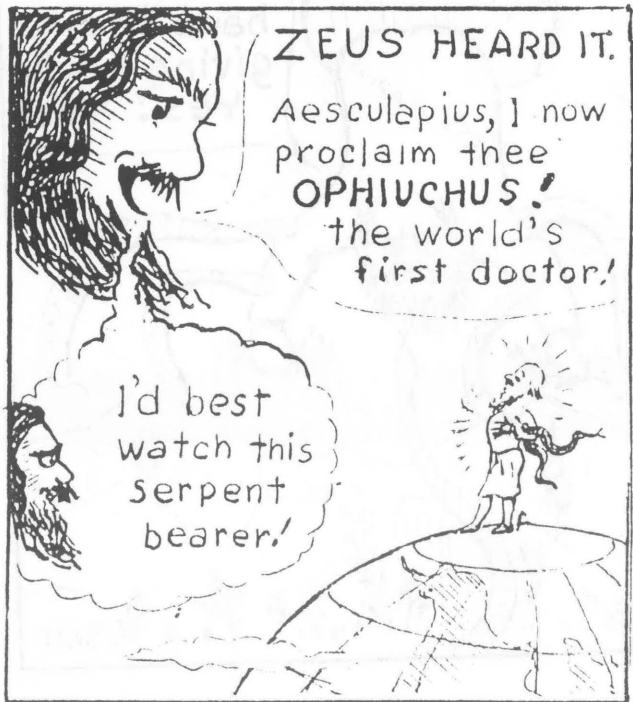
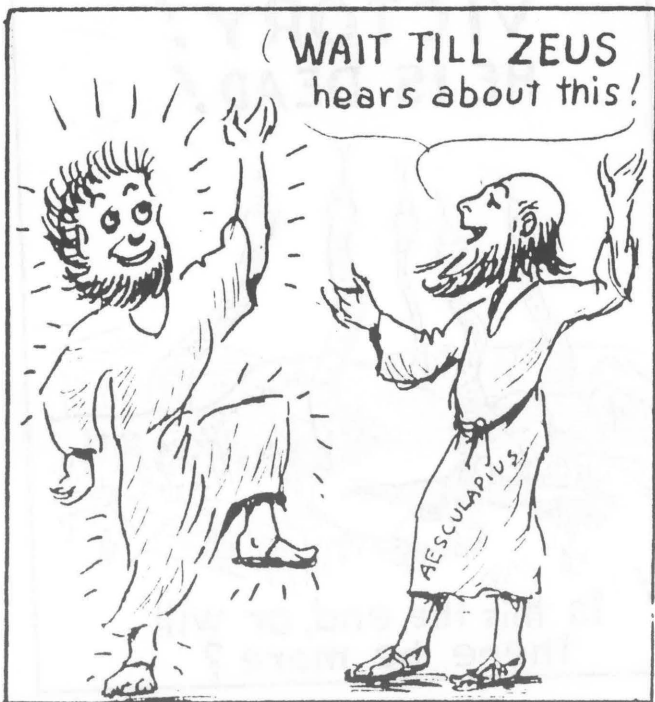
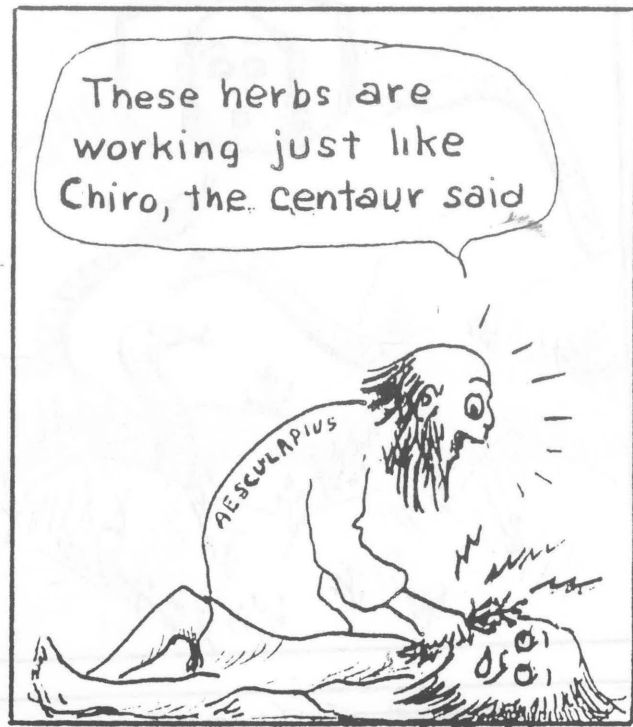
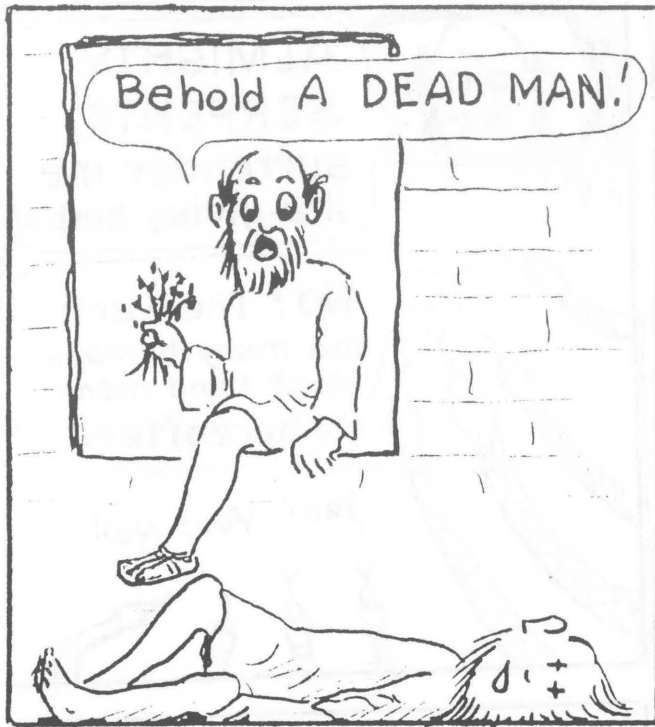
THE STORY OF THE 13th ASTROLOGICAL SIGN.

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THE STORY OF THE 13th ASTROLOGICAL SIGN

As told by Dr. W.G. Reimer and Art Yensen



End of part one...

view from the **BORDERLANDS**

By Tom Brown

THE SEARCH FOR RADIONIC TRUTHS - There is a high degree of interest these days in radionics. Our Albert Abrams and Ruth Drown reprint editions sell at a continuous rate. In light of this intense interest in quality information on the Radionic art Borderland Sciences announces the publication of MY SEARCH FOR RADIONIC TRUTHS by R. Murray Denning. Borderland offered this book in early 1986 when we imported the last of the first printing. We sold out all we could get for \$15 each and still had orders. In agreement with the author we now will have this book in print in a paperback edition which can be purchased through BSRF or your local bookstore for \$9.95, (ISBN 0-945685-01-7). BSRF members may purchase this book at the prepublication price of \$7 (+ P&H). Orders at that price will be taken until the publication date of June 31. Shipment is due sooner and books will be mailed when available.

This book covers Murray's recovery from an "incurable" ailment through contact with healers practicing the radionic arts. This led him on a search for the underlying reality from which radionics partakes. In this book you will meet some of the well known and some of the lesser known adherents of radionics and closely related fields. Albert Abrams, Ruth Drown, Mary M. Leigh, Georges Lakhovsky, Darrell Butcher, Dinshah Ghadiali, George Crile, S.W. Tromp, etc. Many of the better known radionic practitioners of the present day are not mentioned because ample information on them is available elsewhere. This book presents a unique view by an active participant and will aid in keeping the historical record in existence and available to earnest seekers.

RADIONICS AND PSYCHOTRONICS - Dr. Peavy, in his article says that psychotronics and radionics appear to be the same thing. It is this writer's opinion that the two are distinct, though related.

Psychotronics is a term coined by Soviet bloc researchers in the early 1970's to designate gizmos that interacted with psychic force. That is, they are psychokinetic energy detectors. Psyche = mind, tronics = apparatus, therefore psychotronics is forever relegated to the use of equipment by definition.

Psychotronics is a form of psychism with interesting facets worthy of research but obviously integumented with gravity bound (materialistic) manifestations. Any relationship of psychotronics with devices of healing and balancing is out of alignment with the etymology of the word. Thus the term psychotronics is used erroneously to indicate that radionics consists simply of machinery driven by the intent of the operator and as such indicates only some aspects of the opening stages of radionics.

Radionics deals with the interaction of radiant energy and radiant matter in the living spirit of nature. Radionics developed out of the work of healers and seekers after the structure of manifestation. It's modern history spans near 90 years.

Radionics does deal with the interaction of mind and matter, but not as an all encompassing root of the work. While it covers the instrumentation of Drown, Abrams, De La Warr, Copen, Hieronymus, etc. it also would include the work of L.E. Eeman, which utilizes equipment to direct the vital force, but not via interaction of the mind. The color system of Dinshah Ghadiali which uses equipment to produce color, but does not rely on the state of mind, can also be considered in the field of radionics. Taoist

yoga deals with the radionic structure of the body and the flows inherent therein.

Radionics is an open field of growth which goes beyond the patterns of equipment. Radionics instruments incorporate the patterns of the natural order to bring the living body back into its proper alignment with the etheric formative forces. The patterns go beyond the instrument. A living forest will provide healing energy in a more basic form than any physical instrument can provide. Through instrumentation radionics brings one to the very forms of life itself. Life is the ultimate radionic structure.

In today's heavily materialistic space and time radionics can be as tenuous as the ethers themselves while psychotronics, being gravity bound is quite readily grasped as being the real thing by those with heavy grounding in materialistic science.

It is important that people understand the difference between these two as they are so commonly lumped together, usually by well meaning and sincere researchers.

I believe that radionics is quite useful for agriculture as well as healing, but like Dr. Peavy says it would be nice to see some documented tests, such as along the lines of Simon Martin's experiments in plant growth with light and homeopathic plant food. Some documentation already exists in our files and is no doubt continuously being done by present day researchers. How about some current input for this Journal?

COSMIC WEATHER REPORTS - Several issues back we mentioned that we would begin giving Cosmic Weather Reports. This is a full time job in itself just keeping track of the data and we haven't provided a flowing path of info on this subject due to the priority of handling BSRF business. However, anyone with a shortwave receiver can find out what the sun is doing every day.

Radio station WWV, National Bureau of Standards, broadcasts on 2.5, 5, 10, 15, and 20 megacycles 24 hours a day giving time (Coordinated Universal Time), Atlantic & Pacific storm warnings, Solar-Terrestrial Indices. The solar-terrestrial indices are most important for keeping in touch with the cosmic flux patterns.

What is given is the solar flux (10.7 cm wavelength) which varies with flare activity. Late last year it averaged between 88 to 120. This will be getting more intense as we continue into the new solar cycle. Ham radio operators are gearing up as this aids in long distance (DX) communications. Also given is the planetary A-index. This is a measure of the status of the geomagnetic field. For example on April 13, 1988 it was 13. This index is a daily index based on the K-index which is taken every three hours at various global locations. The K-index is logarithmic like the Richter scale for earthquakes.

A geomagnetic storm follows a day or two after a rise in solar activity. On Saturday, April 16 the solar flux was 147 with a predicted rise in geomagnetic activity. Now on April 24, as I do the final printout on the Journal, the solar flux is 104 and has been dropping steadily from the 16th and is predicted to continue doing so until May 2. This may be the cause of the rains in California which has temporarily broken the beginnings of a severe drought.

SUNSPOTS AND THE WEATHER - There has been little available data on solar activity and its influence on the weather. Eric Dollard has kept an eye on the weather and sun for many years. One of the indicators that Eric reported to me and I saw happen is that when the solar flux hits a high point and then a drops Pacific storms form and hit the California coast. This occurred in November/December 1987. The storm brought massive amounts of rain, with the nearby Mattole river rising nine feet in two days. This pattern did not repeat this winter until the last several weeks and we have had an unusually dry winter with an early and dangerous fire season as a result.

There is a new book which has just come out and I sense its importance to research so we are making it available. SUNSPOTS, DUST AND RAINFALL by George N. Newhall, Civil Engineer, is available from BSRF for \$16.00 + P&H. "New correlations of four types of historic data to assist future predictions of precipitation and water supplies. Contains over 200 years of monthly sunspot numbers and over 100 years of monthly rainfall data at 14 stations, worldwide."

CLOUDS AND THE WEATHER - For those interested in the weather we also carry CLOUDS - THE REALM OF THE AIR by Luke Howard and Ernst Lehrs (7.95 + P&H). Around 1803 Luke Howard provided the nomenclature of the various cloud patterns we see in the sky. They are:
"CIRRUS - Parallel, flexuous, or diverging fibres, extensible in any and all directions;
CUMULUS - Convex or conical heaps, increasing upward from a horizontal base;
STRATUS - A widely extended, continuous, horizontal sheet, increasing from below;
NIMBUS - the rain cloud.

Howard purposely did not include pictures of the clouds because he states that only by DIRECT OBSERVATION will one come to learn of the metamorphoses of these atmospheric states. In the second part of the book Ernst Lehrs gives the analogy of cloud metamorphosis to the sections of the plant:

"The plant becomes an image of that which goes on in the region of the clouds: and the clouds let us see an image of what goes on in the life-cycle of the plant on earth. Widening our view in this way we can truly see:-

In the FLOWER	the plant's state of	CIRRUS
In the LEAVES	" "	CUMULUS
In the ROOT	" "	STRATUS

"Beyond the 'cirrus' sphere is formed the seed that drops to the earth carrying new life into it -- whether this be the seed of the plant or the rain-drop from under the heavens."

This book will guide one to the basics needed for understanding the weather from direct observation.

When the planetary A-Index is high, the clouds present the most unique patterns because they are indicators of the cosmic flux, just as the plasma tubes around high frequency coils indicate the type of field around the apparatus. The patterns of the clouds indicate the characteristics of flares on the sun.

We get letters asking how to build a Reichian Cloudbuster, or for plans on Trevor Constable's geometric weather units. Do some homework and find out what is happening with the weather first. Weather engineering is not a home science fair project. It should only be undertaken by people who are fully aware of how the weather functions. Once you gain experiential knowledge of this the rest will fall into your hands if it is your calling. I fully support the development of beneficial technologies such as this, but do not provide plans for manipulating nature. Borderland will direct readers sources to use for those who wish to understand the functioning of the etheric flows around our planet. Trevor credits MAN OR MATTER by Lehrs as giving him the keys to develop the equipment he has now. Start there and with Reich's own works.

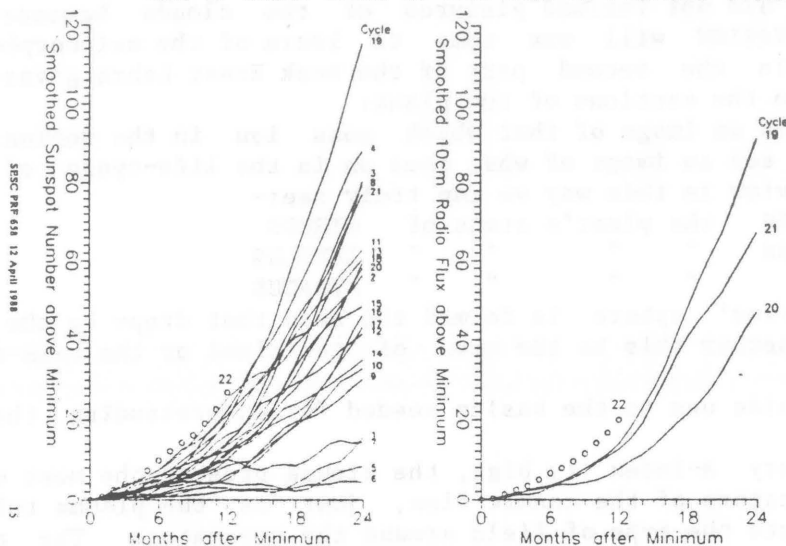
COSMIC ACTIVITY AND PLANT GROWTH - The activities on the sun are the dominant force in influencing many aspects of life here on earth. Rudolf Hauschka, in THE NATURE OF SUBSTANCE, (\$14.50 + P&H) provides graphs of sprout growing experiments he did over a 10 year period. He shows the dominant cosmic force in plant growth is the lunar cycles, but there can be seen an overriding solar cycle when the 10 years of graphs are studied. This information should be taken into account by all who are doing agricultural experiments, as the cosmic state of affairs is a major influence. I recommend that all further agricultural experiments be charted against the lunar phases, the solar flux and the planetary A-index.

ASTROLOGICAL CHARTS - In order to see if positions of the planets are indicators of the solar activity Borderland has just purchased an astrological program to print out charts of the heavens. We can print out the geocentric charts for any time and place on the planet (standard astrological) and can also print the heliocentric charts. We plan on using this tool to check on solar positions during major flares and other activities during the next few years as the sun gets more active.

This is a powerful tool and we will use it for research. Information on the services we can provide will be in the next Journal. The software is BLUE*STAR from Matrix Software, 315 Marion Avenue, Big Rapids, Michigan 49307.

SOLAR CYCLE 22 SO FAR - Here is a graph provided by the National Oceanic and Atmospheric Administration - Space Environment Center showing the rate of increased activity taking place in the current solar cycle (22). It could be that Cycle 22 will be the most intense on record which will portend an interesting progression of events leading up to the year 2000. Researchers should plot the trend of news events, natural and man inspired, against the solar activity. You will be surprised what you find.

RISE OF SOLAR CYCLE 22 COMPARED TO PREVIOUS CYCLES



THE CHANGING EARTH - These two clippings from the San Fransisco Chronicle, April 8, 1988 present indications of the increase of planetary activity. In combination with the rampage of civilization and the looks of Cycle 22 it is likely that we will see major earth changes as we approach the millennium. One doesn't need a channelled entity to tell them that. An open mind and open eyes will provide clear insights.

Atlantic Waves Have Grown Since the '60s

Deutsche Presse-Agentur

London

Waves in the northeastern Atlantic Ocean are getting bigger, according to a study by the Deacon Laboratory of the Institute of Oceanographic Sciences published yesterday in the scientific journal Nature.

The laboratory, located in Surrey County in southern England, said the biggest waves in the 1960s reached 39 feet and the average was 7 feet. Now the biggest are 59 feet and the average waves are 9 feet to 10 feet.

The study said no explanation had been found for the phenomenon. Speculation that storms sweeping across the Atlantic might have changed course was discounted because considerably bigger waves have also been registered in the western Atlantic.

More Icebergs On the Go In Antarctic

Associated Press

Washington

The number and size of icebergs breaking away from Antarctica seems to be increasing and may be a symptom of a rise in the Earth's temperature, a government expert on ice said yesterday.

"An abnormally high amount of ice shelf calving is occurring in Antarctica," said Glenn Rutledge of the Joint Ice Center, run by the Navy and the National Oceanic and Atmospheric Administration.

The planet's rising temperature may have caused the new activity, but so far there is not enough information to be certain, said Russell Koffler, who heads the NOAA's satellite services.

"We have only 12 years of data — that is nothing in the geological (time frame)," added Rutledge.

He noted, however, that both abnormally large icebergs and increasing numbers of them have been breaking loose in the past year or two. He added, "The poles are sensitive indicators of change" in global climate.

Some scientists believe that a global temperature increase over the past century amounting to one or two degrees Fahrenheit is leading to major changes in climate.

Last year, an iceberg called B-9 broke off the Ross ice shelf. B-9 covered 1,978 square miles, nearly the size of the state of Delaware. At a thickness of 800 feet, it contains enough water to supply Los Angeles for 700 years, said Rutledge.

STEINER TAPES - Borderland is pleased to announce that we will be carrying a portion of the Rudolf Steiner lectures taped by the late Rick Mansell who founded the Rudolf Steiner Research Foundation in 1956. These tapes will sell for \$6 per single lecture. The first tapes to be released this summer by Borderland are: SECRETS OF WEATHER PHENOMENON; WEATHER & ITS CAUSES; MORAL LIGHT VS IMMORAL ELECTRICITY; MAN'S RELATION TO ANCIENT WISDOM IN THE AGE OF ELECTRICITY (two tapes, \$12); TRUE NATURE OF SUBSTANCE & ENERGY; PATHS TO SUPERSENSIBLE KNOWLEDGE; POTENTIZATION & PERIPHERY FORCES; and Steiner's COURSE IN LIGHT (12 tapes \$50). We will have more information on these tapes with further listings in future Journals. We will also provide more information on Rick Mansell and his work. He spent the last 30 years or so of his life recording near 1500 of these lectures. This material is vitally important to serious researchers. Orders are being taken now and we will ship A.S.A. Ready. Add \$1.50 for the first tape & \$.60 each additional. Californians add 6% sales tax. Overseas add \$2.00 for the first tape and \$.75 each additional, surface. Double for first class or airmail.

For more information about the Rudolf Steiner Research Foundation write them c/o Don Hosier, 1753 Appleton St, Suite D, Long Beach, 90802. (213) 437-5438.

ASTROSONICS - Borderland now offers a video on the ASTROSONICS work of Michael C. Heleus. ASTROSONICS uses sound and light to represent the structures of the cosmos in personal settings. ASTROSONICS is the term coined by Michael in 1974 to describe the rendering of an astrological chart as sound and its effects. The meaning of the aspects or planetary angles in a natal chart can be directly experienced as sound. ASTROSONICS provides the sounds of the planets at your moment of birth. Borderland is happy to present this excellent presentation on the structure of the universe and the relationship of its energies. VHS. \$39.95 + \$3 P&H.

We will be presenting more on Michael Heleus' interesting work in upcoming Journals. If you would like more information on how to obtain ASTROSONICS sound tapes for personal use write: Michael C. Heleus, ASTROSONICS SERVICES, 2309 Hollywood Ave. NW, Albuquerque, NM 87104 or call (505) 242-5082.

RECEIVED FOR REVIEW

* FAINSHAW PRESS, Box 961, Westmoreland, NH 03467, has sent us two books: A Primer of Rotational Physics and Rotational Physics - The Principles of Energy, both by Myrna M. Milani and Brian R. Smith. These are the first two books in a series said to present a new theory of science. They propose to explain how we may use basic energy forms without depleting vital resources. They look like curious books for those interested. There is probably some good material in these books so if any Borderlander would like to read them and write a review for the Journal I'll gladly pass them on.

* HIGH VOLTAGE PRESS, PO Box 532, Claremont, CA 91711 has sent us TESLA, THE LOST INVENTIONS. At first I thought, "another Tesla book," but author George Trinkhaus tells how he had to "deschool" himself to get into Tesla's work and write this book. He does an excellent job of distilling Tesla's many patents and inventions into an informative compendium. Contents include: Disk-Turbine Rotary Engine, Spark Gap Oscillator; Tesla Coil; Magnifying Transmitter; Lighting (important info); Transportation; Free-Energy Receiver; and George also uses the term "cycles per second", instead of the term Hertz in current use. The term Hertz is a slap in Tesla's face and this book uses the proper terminology. It is refreshing to see a new book emerge that contains important data. We're adding this book to the Borderland listing and you can order through BSRF or the High Voltage Press. \$5.95 + P&H.

CONTACTS - Be kind and send a buck or stamps when responding. If you would like to be listed, it is free and a good way to contact those of similar mind or let others know about good projects and services you have found.

* CHINESE NATIONAL CHI KUNG INSTITUTE, PO Box 105, Moulton AL 35650. Publishers of "Qi Gong Bimonthly" dedicated to documenting Taoist Internal Arts, and they also have correspondence courses and video training programs. Excellent material on how to use your own living energy to create a better state of health.

* BAUM-THOR INTERNATIONAL, PO Box 3110, Laredo TX 78044. Manufacturers of the Possell Bladeless Pumps. Here is Tesla technology that can be put to use today. Write for more information.

* AQUARIAN MEDIA, PO Box 566, Milsons Point, Sydney, Australia 2061. Publishers of "The Crystal Visionary" newsletter covering many aspects of the use of crystals and related earth energies. "Now Worldpeace and the ending of hunger and the harmony of humanity is within our reach. There is an increasing surge of consciousness-raising activity on our planet. Be a visionary for the world and yourself." 4 issues/year. US\$16, AUS\$10.

* PARAPSYCHOLOGY SOURCES OF INFORMATION CENTER, 2 Plane Tree Lane, Dix Hills, New York 11746. Publishers of Parapsychology Abstracts International (ISSN 0740-7629), providing summaries of the literature of parapsychology from the earliest times to date.

* REX RESEARCH, Box 1258, Berkeley CA 94701. Mobius Rex is the librarian of the fringe science world. If you are looking for information on alternative energy, transmutation, electro-static propulsion and dozens of other similar topics then send for this catalog today.

BSRF BUSINESS

* This Journal could have been many pages larger to fit all the material sent in by members. Many thanks for all the input, and keep it up. Remember, there will be another issue in two months packed solid with unique information.

* At \$20 per year many say BSRF is the best deal going in this field. Postal & printing costs have risen. The board of directors has discussed raising the basic membership rate. We decided to keep the basic rate at \$20 worldwide with the Journal shipped bulk or surface rate. Overseas airmail postage costs around \$20/year extra and we must raise our intake on that, so to get the Journal airmail will be \$40 per year. We have new rates for Supporting Membership \$50/year; Sustaining/Membership \$100/year; Life Membership \$1000. Membership is non-voting. Membership entitles one to a year of The Journal of Borderland Research and the following discounts off the retail price of research material purchased through Borderland, excepting sale prices and special offers.

Regular & Supporting members: 1-4 units 10%, 5-9 units 15%, 10-24 units 20%, 25/up 25%. For Sustaining & Life members the discounts will be 25% off retail.

* LITHIUM AND LITHIUM CRYSTALS by Haroldine is being readied for the printer. Should be out before mid-summer. Work in progress now. All details next Journal. Tentative price of \$9.95, paperback. \$7 prepublication price, shipped when ready.

* An updated catalog is in production. Some of the new books to be listed, and available now are: MAN, MINERALS and MASTERS by Dr. Charles Littlefield \$7.50; HEALTH

AND LIGHT By John N. Ott \$2.95; THE BRAIN SCALE OF DR. BRUNLER by Arthur M. Young \$2.95; PSYCHOMETRIC ANALYSIS by Max Freedom Long \$3.95; SECRET LIFE OF PLANTS by Peter Tompkins & Chris Bird \$7.95; AHRIMANIC DECEPTION by Rudolf Steiner \$2.95; THE ETHERIZATION OF THE BLOOD by Rudolf Steiner \$5.00. Space does not permit the listing of contents, but many will recognize this material. BSRF Members may take the discounts listed below. For these books and all other books from BSRF listed in this Journal add \$2.25 for the first book & \$.60 each additional. Californians add 6% sales tax. Double for first class. Overseas please write for proforma invoice. We are working to establish a good rate structure for foreign orders. We are quite happy with our overseas customers, we have many in the Australia/New Zealand area, in Europe, Asia, South America, Africa, and we admit to the difficulty of a standard figure for postage. Tell us what you want, we'll figure the cost and postage, and send an invoice. We'll ship on receipt of International Money Order of bank draft in \$US to cover the invoice. Or if you want to estimate we'll credit or bill for over/under.

1987 FINANCIAL REPORT

INCOME

SALES/REVENUE	\$35570	
(Books/Equipment/Donations)		
Less COST OF GOODS	9840	

GROSS PROFIT	25730	
MEMBERSHIP DUES	15035	

TOTAL INCOME	\$40765	\$40765

EXPENSES

ACCOUNTING/AUDITING/LEGAL	\$ 837	
ADVERTISING	2048	
AIR/AUTO/CONVENTIONS/HOTELS	4355	
COMPUTER - Rental/Consultation	2745	
COPIER - Lease/Service	3226	
INSURANCE	347	
MISC/BANK/DEPRECIATION/DUES	1695	
OFFICER COMPENSATION (accrued)	15600	
POSTAGE/FREIGHT	3175	
PRINTING - JOURNAL	6406	
RENT - Office (accrued)	9000	
SALARIES & WAGES	5197	
SUPPLIES - Computer/Copier/Office	3693	
TAXES - Federal/State/Sales	480	
UTILITIES - Electric/Heat/Phone	7334	

	\$66138	\$66138

NET LOSS 1987		\$25373

Figures are rounded to nearest dollar. The loss exists because rent and officer compensation has not been paid. The wages paid are for a office worker employed in 1987. We are continuing to make BSRF a strong Foundation providing information on Borderland Research. We would like to get to the point where we can pay people to do the necessary work to keep the Foundation functioning so that research may continue. Many projects are in the making and the Journal will keep Members posted on happenings. Thank you all for your support as we travel the Borderlands of Science together.



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THE LAKHOVSKY MULTI-WAVE OSCILLATOR HANDBOOK edited by Tom Brown. To provide clear avenues of research we have edited our MWO file spanning over 50 years of documentation into the most complete compilation available on Lakhovsky's work and its offshoots. Contents include: The researches of Borderland Associates reported in the Journal of Borderland Research (1963 to 1987) with comments by Riley Crabb and Tom Brown; The Russian Rejuvenation Machine by Bob Beck; Regenerating Oscillating Circuits by Mark Clement; Tesla's Giant Oscillator; Updates on the Beck Circuits by Klark Kent and other Researchers; Notes on the original Lakhovsky Oscillator by Eric Dollard; Comments on the relationship between the MWO and Orgone Accumulators by Trevor Constable; The Lakhovsky MWO in India by Dr. A.K. Bhattacharya; High Powered and Transistorized MWO circuitry; Lakhovsky's Vibratory Circle translated by Bodo Capeller; Radiations and Waves by Georges Lakhovsky; Lakhovsky's three patents (MWO, Vacuum Tube MWO and Microphone/Speaker Assembly); The Integratron II by William F. Hamilton III; The Magnetic-Arc Instrument of S.S. Night; Upgrading Cellular Activity With Electro-Magnetism by Aaron Steinberg; and related information on Shortwaves in Medicine and Log Periodic Antennas. This book includes all previously published Borderland MWO info from books and Journals and contains new and unpublished material. Publication date June 31, 1988. Approximately 150 pages, spiral bound, \$15.95

THE CRYSTAL BOOK Edited by Alison Davidson. Crystals.... Nature's Jewels.... What is known about them? To satisfy today's demand for quality information on Crystals we have edited the extensive Borderland Crystal File into one of the most comprehensive volumes available on the subject. Contents include: THE THERAPEUTIC POWERS OF QUARTZ, HISTORY OF CRYSTALLOGRAPHY & CRYSTALLINE FORM, CRYSTAL FORCE, LIVING CRYSTALS, CRYSTAL GAZING, THE GLITTER OF SYNTHETIC CRYSTALS, CRYSTALS AND ELECTRICITY, THE LITHIUM-QUARTZ CRYSTAL, LITHIUM - THE ULTIMATE COMPOUND, AQUALITHIA - THE LIQUID CRYSTAL, PRECIOUS & RARE STONES EMPLOYED IN HEALING, CRYSTALS AND CANCER, ROCK POWER FOR HEALTH & WEALTH. Everything you've wanted to know about Crystals and a few things that will surprise you!! One thing for sure -- this book will provide you with a most comprehensive collection of information on this subject. Illustrated, 92 Pages, Spiralbound. \$15.00

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